



The performance of various rate 0.71 FEC coding schemes are shown for a 188 byte frame.. Additionally, a rate 2/3 convolutional code is provided along with an iCODING 2K rate 2/3 convolutional turbo code (CTC) for purposes of comparison. An iCODING code of rate 5/7 was not available at the time of preparation.

The “standard” turbo code uses two terminated sixteen state constituent codes. Both CTC curves include implementation loss.

The graph illustrates that convolutional turbo codes provide the greatest coding gain across the expected points of operation between 1E-6 to 1E-9 BER and that the coding gain is as much as 0.9 dB better than block

Turbo Codes (BTC) in this range. CTC performance continues to improve after the infection point, albeit with a more shallow slope.

As shown by the iCODING CTC, performance can be enhanced when lower BER operating points are required, although this additional performance does come at the expense of some additional complexity. All points have at least 61 events.